

**Statement of Mr. William H. Tobey
Deputy Administrator for Defense Nuclear Nonproliferation
National Nuclear Security Administration
United States Department of Energy**

Before the Senate Committee on Armed Services

July 31, 2008

Chairman Levin, Ranking Member McCain, and Members of the Committee, thank you for the invitation to appear today to discuss the process of achieving verifiable denuclearization of the Korean Peninsula. My remarks will focus on (1) the role of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA) in implementing agreed denuclearization measures in North Korea, (2) progress to date, and (3) planning for anticipated "Phase Three" verification and material removal activities, including the budget requirements for those activities.

DOE/NNSA provides two main forms of support for U.S. efforts to eliminate the nuclear threat posed by North Korea. First, we provide technical experts to advise Ambassador Hill and the U.S. delegation to the Six-Party Talks, including the Denuclearization Working Group and Economy and Energy Cooperation Working Group, on issues related to the disablement and dismantlement of North Korea's existing nuclear programs as well as verification. Second, we lead technical teams responsible for on-the-ground oversight of implementation of denuclearization measures agreed to in the Six Party Talks context.

Under the September 2005 Joint Statement, North Korea committed to abandoning all of its nuclear weapons and existing nuclear programs and returning, at an early date, to the

Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and International Atomic Energy Agency (IAEA) safeguards. As a first step towards this objective, North Korea agreed in the February 13, 2007 “Initial Actions Agreement” to shut down and seal its nuclear facility at Yongbyon, for the purpose of eventual abandonment, and also to invite back IAEA inspectors to conduct monitoring and verification as agreed between the IAEA and the DPRK. In July 2007, the IAEA confirmed that the Yongbyon facility had been shut down.

Under the October 3, 2007 Agreement on Second Phase Actions, North Korea agreed to disable all existing nuclear facilities subject to abandonment under the 2005 Joint Statement. North Korea further agreed to disable the three core facilities at the Yongbyon site – the 5MW(e) reactor, the reprocessing plant, and fuel fabrication plant – by the end of 2007. A list of 11 “Phase II” disablement tasks was agreed based on the findings of a Six-Party team of experts, including a technical representative from DOE/NNSA, that visited Yongbyon in September 2007 to assess the feasibility of various disablement approaches.

Since early November 2007, teams of DOE/NNSA-led nuclear monitors have maintained a continuous on-the-ground presence at the Yongbyon site overseeing the implementation of agreed disablement tasks. As of today, eight of the eleven agreed tasks have been completed, including all agreed tasks at the reprocessing plant and the fuel fabrication plant. Discharge of the nearly 8,000 fuel rods from the core of the 5MW(e) reactor continues, with over 4,000 rods discharged, but progress has been slower than anticipated.

Equipment developed by DOE/NNSA has been installed at the 5-MW(e) reactor to monitor the fuel rods as they are discharged. As a result of these disablement actions, we estimate that it would take North Korea a significant amount of time, upwards of one year or more, to reconstitute a plutonium production capability at Yongbyon. Of course, North Korea's pledge to abandon all existing nuclear programs extends beyond the plutonium production plants at Yongbyon. It also includes other nuclear facilities or activities to be subject to verification as agreed by the Six Parties.

Working-level cooperation between U.S. teams and their North Korean counterparts has been generally constructive. Our experts have been able to: perform maintenance on installed monitoring equipment; access the spent fuel pond to measure water temperature, clarity, and pH levels; and access the reprocessing plant and fuel fabrication plant to verify that completed disablement tasks remain in effect. Our working-level relationship with IAEA inspectors monitoring the shutdown at Yongbyon also has been very strong.

As Ambassador Hill has noted, the Six-Party Talks are moving toward Phase Three activities, including negotiation of a comprehensive verification protocol and negotiation of dismantlement and fissile material removal measures. DOE/NNSA will continue to provide policy and technical support to these negotiations, and we stand ready to implement agreed verification measures and other tasks as requested by the Six Parties.

While we have been actively planning to support implementation of Phase Three, it is difficult to predict the full scope and schedule of Phase Three activities. The Six Parties

have agreed that verification will include access to facilities, documents and personnel, and we anticipate that DOE/NNSA will be called on to undertake technical measures to implement the verification process. The Six Parties continue to work on negotiating a comprehensive verification protocol outlining the full scope of verification activities. We hope to begin agreed activities quickly once the protocol is in place. The North Korean declaration and the more than 18,000 pages of operating records provided by the DPRK provides a basis to initiate further verification activities. We anticipate that verification will proceed in parallel with other Phase Three activities, which we hope will include dismantlement of facilities and removal of the DPRK's fissile and other nuclear materials.

Although the exact details of Phase Three are yet to be negotiated, our planning assumption is that DOE/NNSA will be called upon to support implementation of comprehensive verification and denuclearization measures. To plan for something less than this and then be caught unprepared is unacceptable.

We anticipate that the costs of implementing Phase Three activities will be substantially higher than the costs of Phase Two. To date, DOE/NNSA has spent approximately \$15 million in support of Phase Two implementation. In addition, the State Department's Nonproliferation and Disarmament Fund (NDF) has provided assistance of approximately \$20 million for the costs of completing the disablement activities in Phase Two. NDF assistance has been necessary because DOE has been prohibited by Section

102(b) of the Arms Export Control Act – also known as the Glenn Amendment – from providing financial assistance to the DPRK in support of the denuclearization process.

By legislation recently enacted which provides the President with the authority to waive Glenn Amendment restrictions, Congress has addressed this problem and opened the door to a more substantial DOE/NNSA role. If the President exercises this waiver authority, DOE/NNSA will be able to procure, ship to North Korea, and use equipment required to support the full range of disablement, dismantlement, verification, and material packaging and removal activities that Phase Three will likely entail.

If these activities begin soon and continue at a more rapid pace, we estimate that the total implementation costs could amount to an additional \$34 million in fiscal year 2008 and over \$360 million in fiscal year 2009. The bulk of these costs relate to packaging and disposition of separated plutonium and spent fuel at Yongbyon, but they also cover implementation of critical measures necessary to verify North Korea's nuclear declaration and ensure our teams on the ground have adequate protective equipment and health physics support. The cost to the USG of this effort will largely fall on DOE/NNSA, as the lion's share of verification work involves the time and expertise of technical specialists from DOE/NNSA.

I would like to conclude by reiterating our strong commitment to supporting U.S. efforts to achieve the verifiable denuclearization of the Korean Peninsula. Through the Six-Party process, we have achieved tangible progress towards this goal, and our dedicated

staff of technical experts remains ready to provide whatever additional support may be required as the process moves forward.

Thank you and I look forward to your questions.